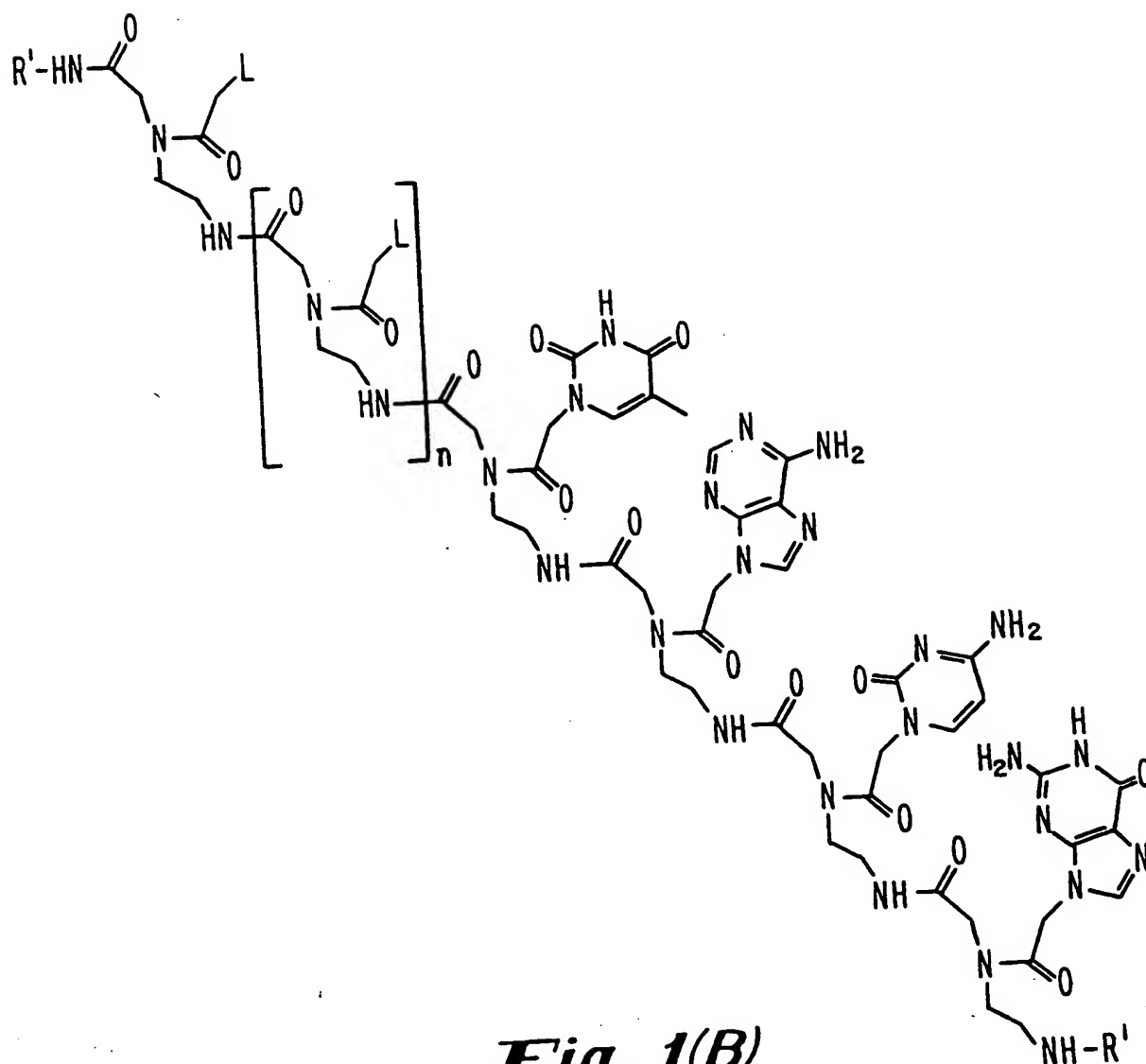


Fig. 1(A)



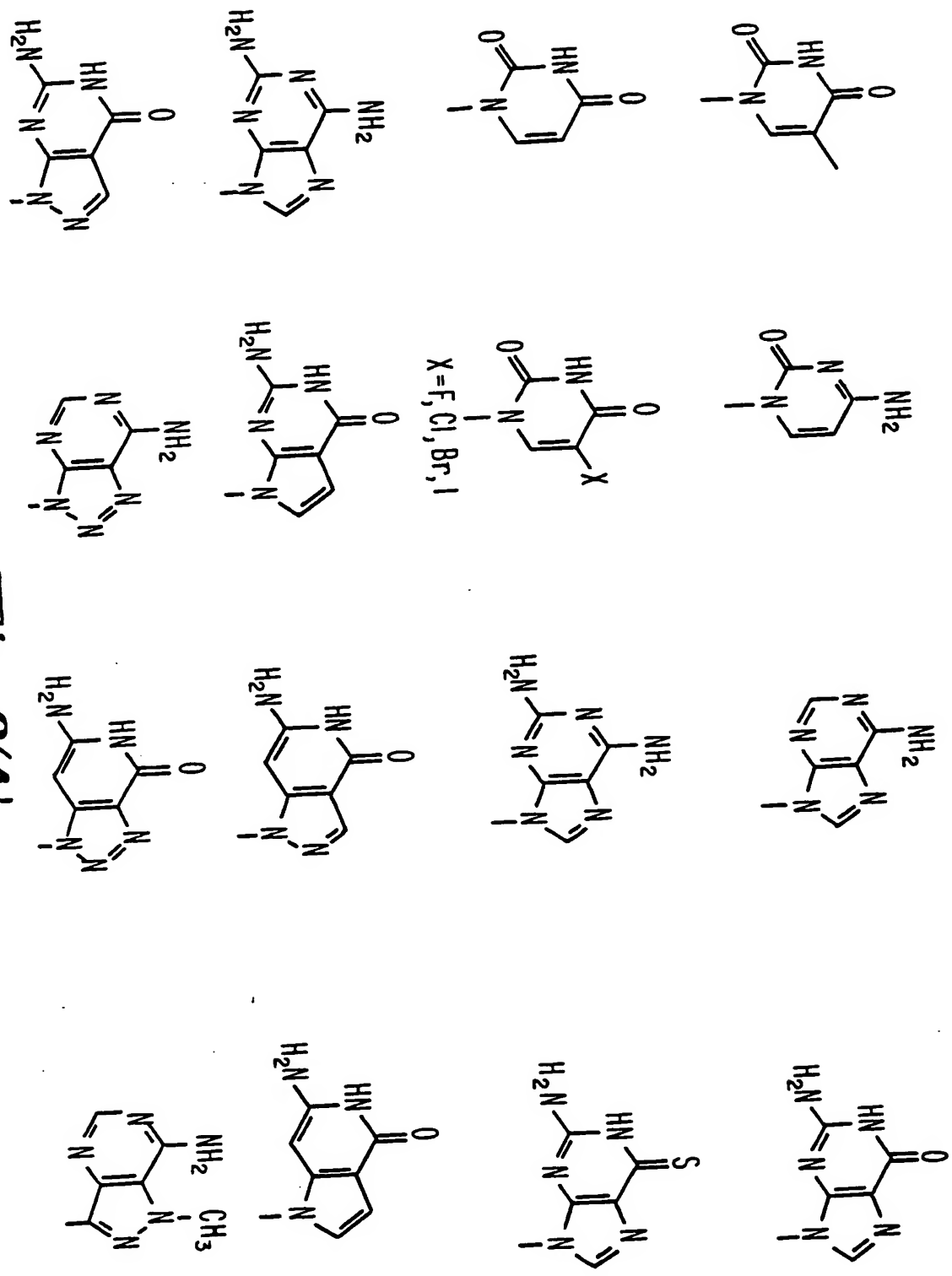


Fig. 2(A)

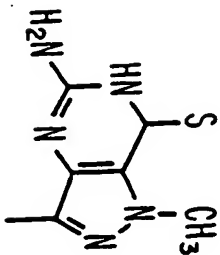
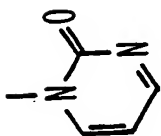
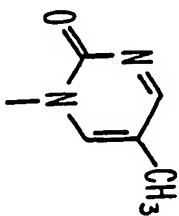
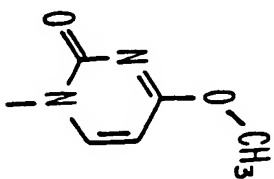
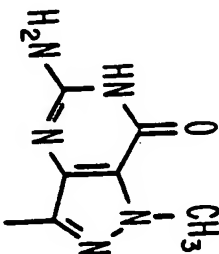
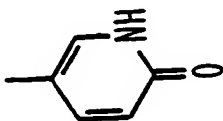
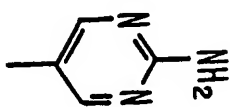
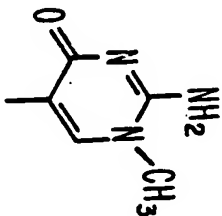
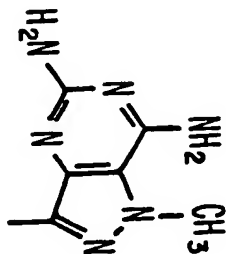
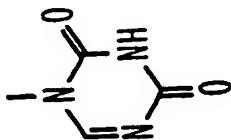
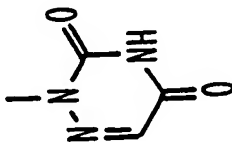
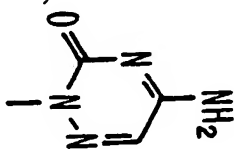
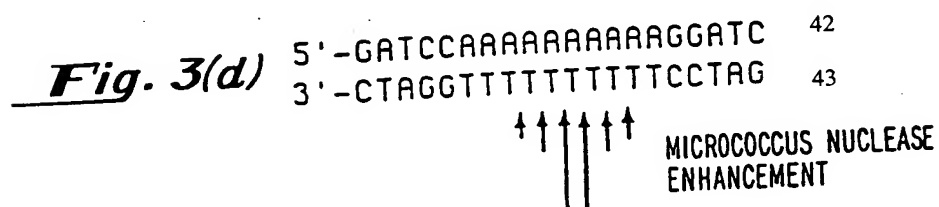
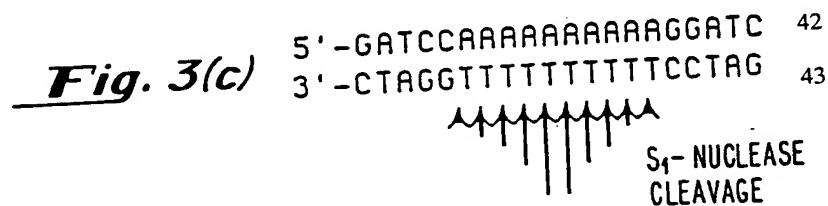
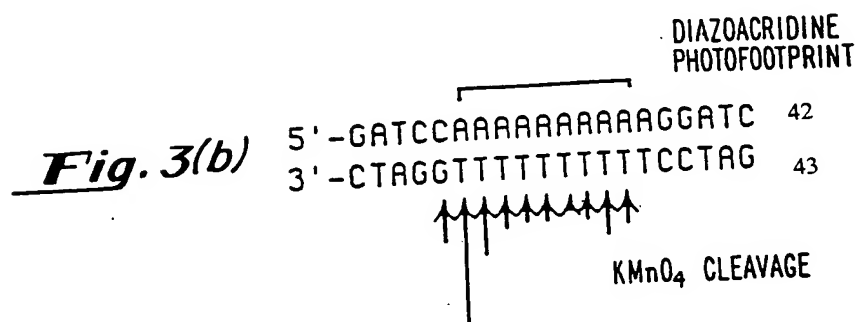
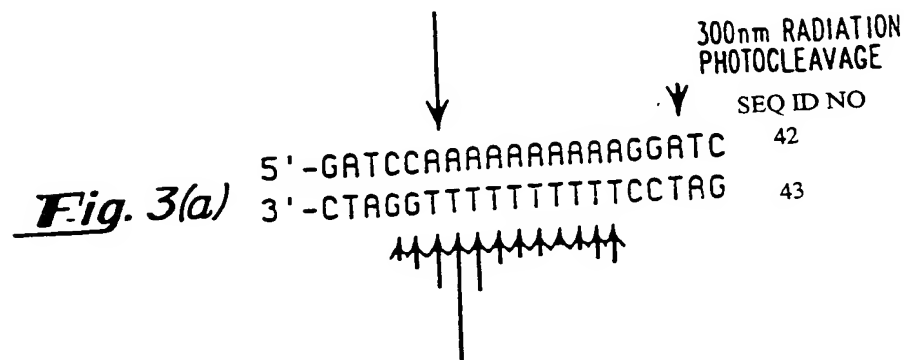


Fig. 2(B)



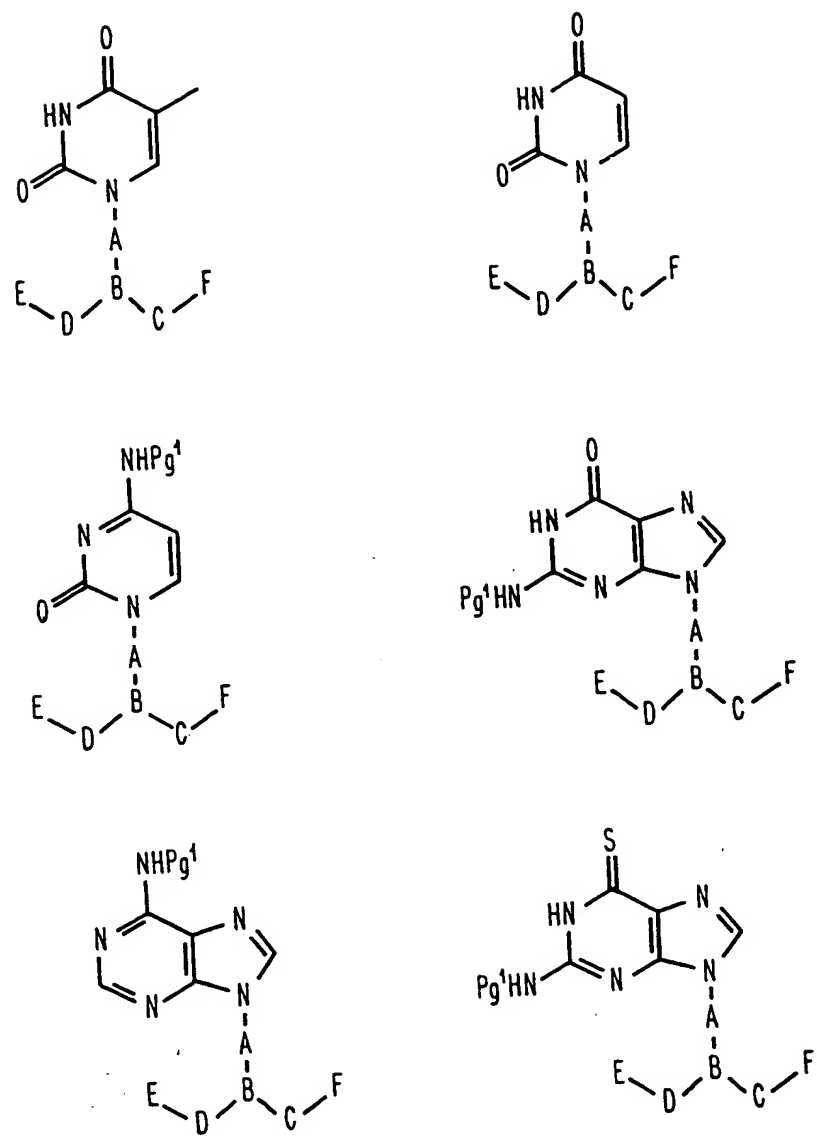
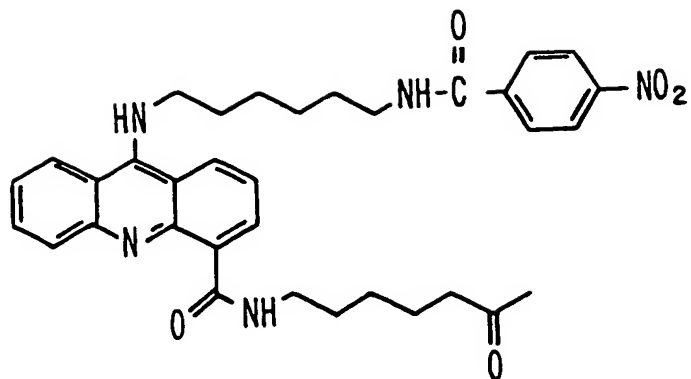


Fig. 4



Act¹

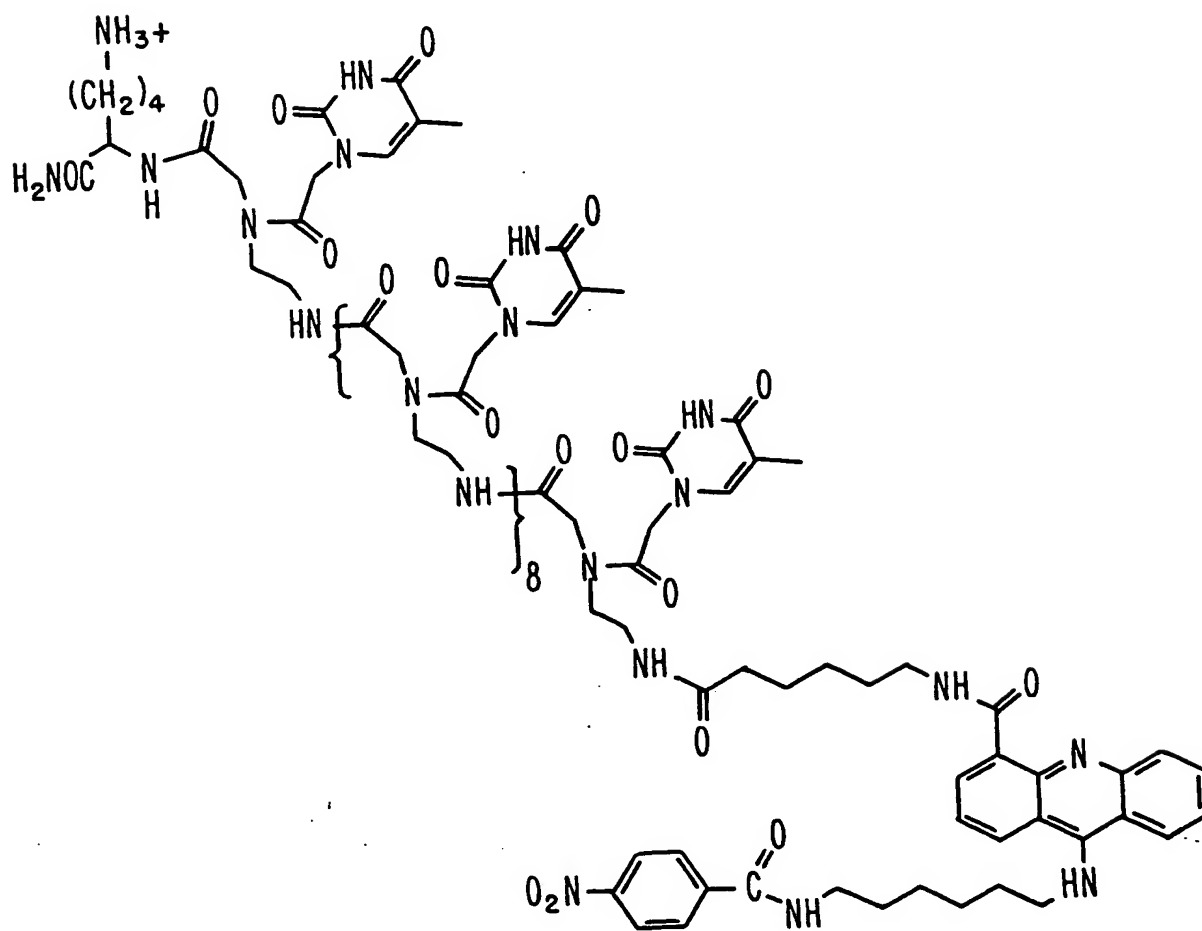
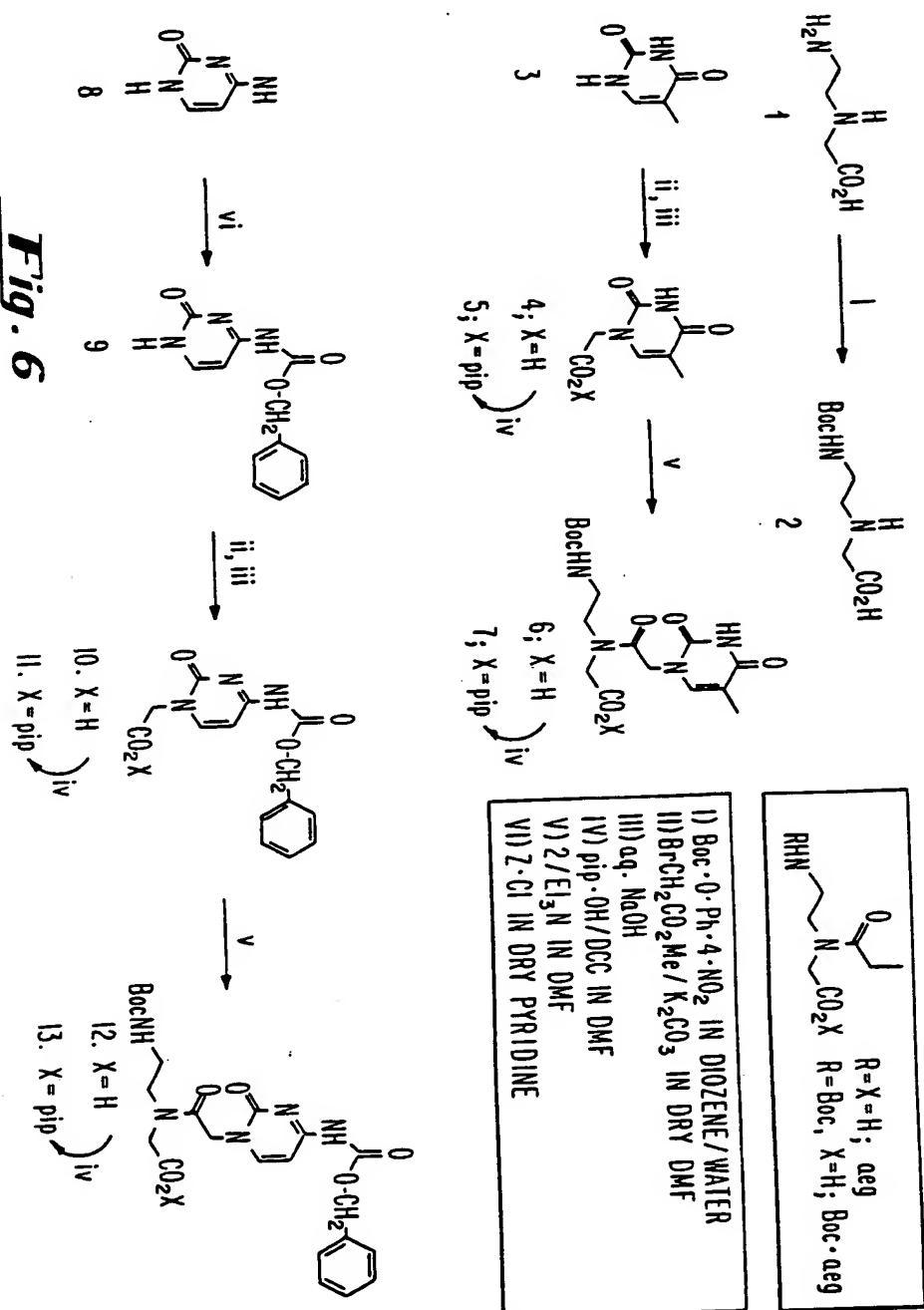
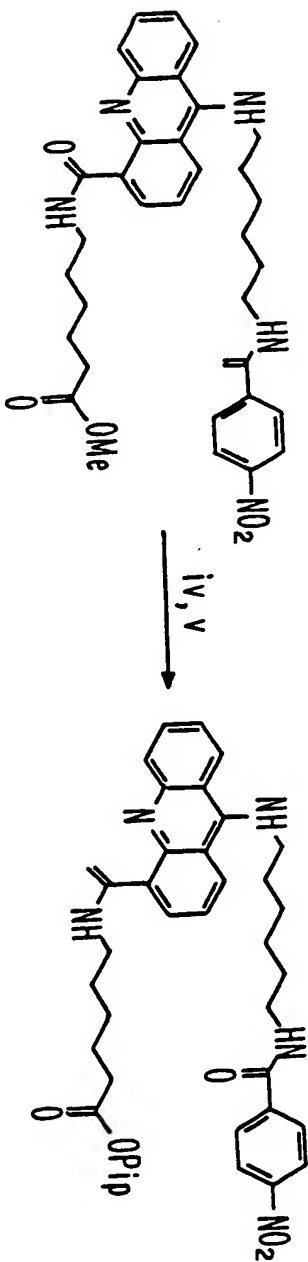
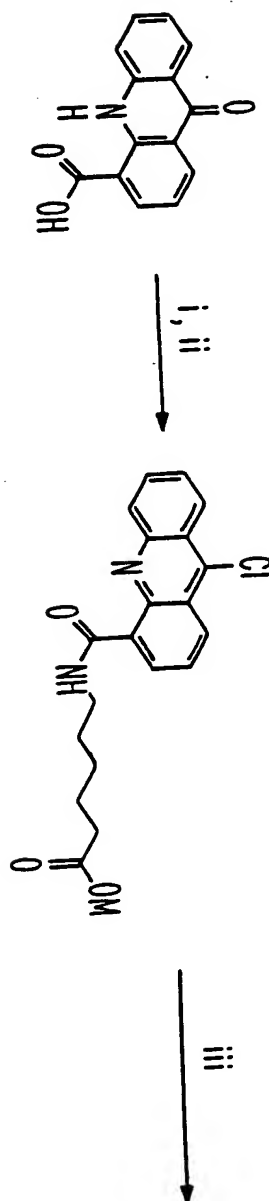


Fig. 5

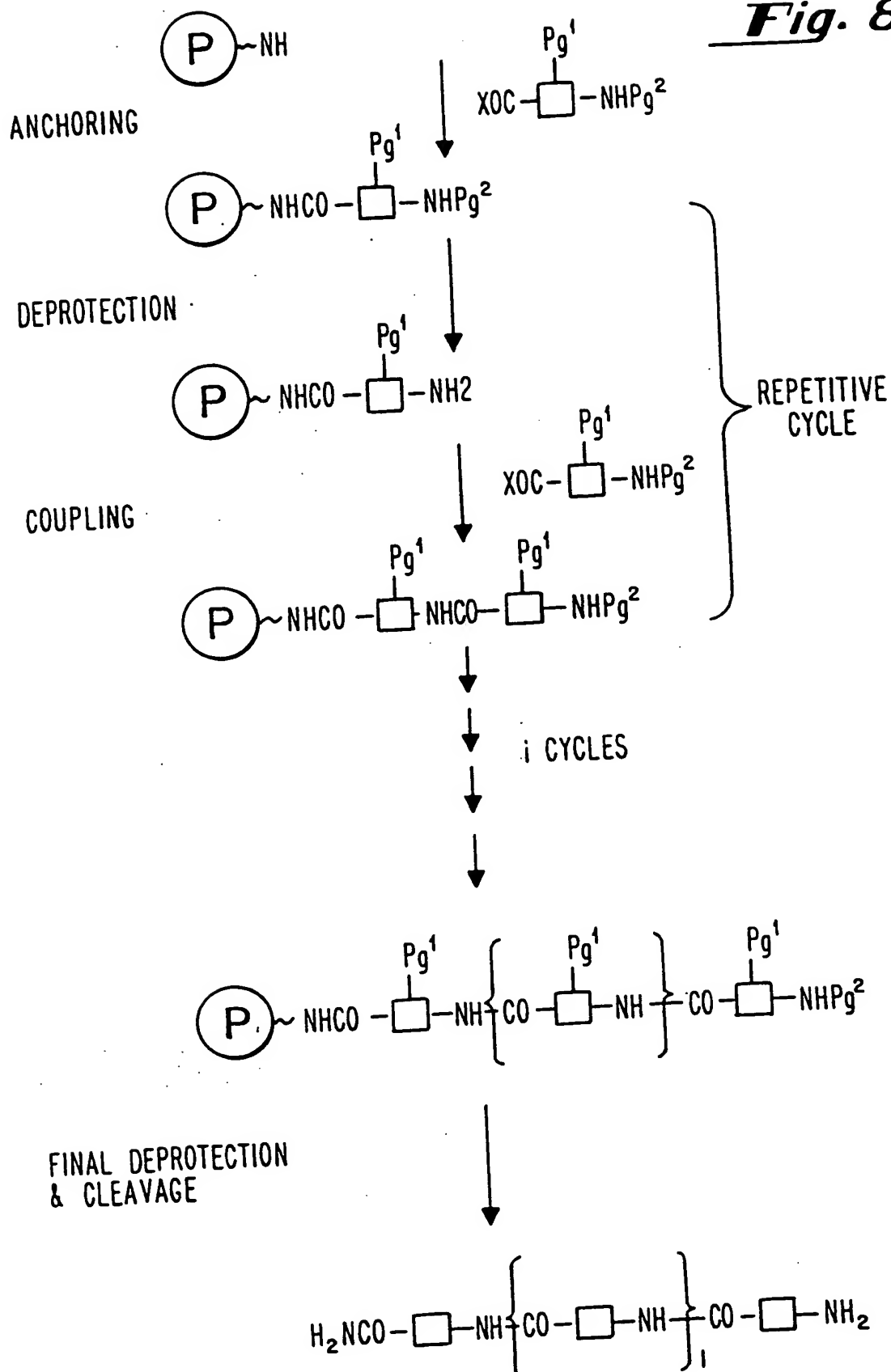




- I) SOCl_2 / DMF (cat.) REFLUX
 II) $^+\text{H}_2\text{N}(\text{CH}_2)_5\text{CO}_2\text{CH}_3$ / Et_3N / CH_2Cl_2 AT 0°C
 III) $\text{PhOH}/4\text{-NO}_2\text{-Ph-CONH}(\text{CH}_2)_6\text{NH}_2$ AT 120°C
 IV) DMF/aq. NaOH
 V) DMF/ CH_2Cl_2 / PhOH / DCC

Fig. 7

Fig. 8



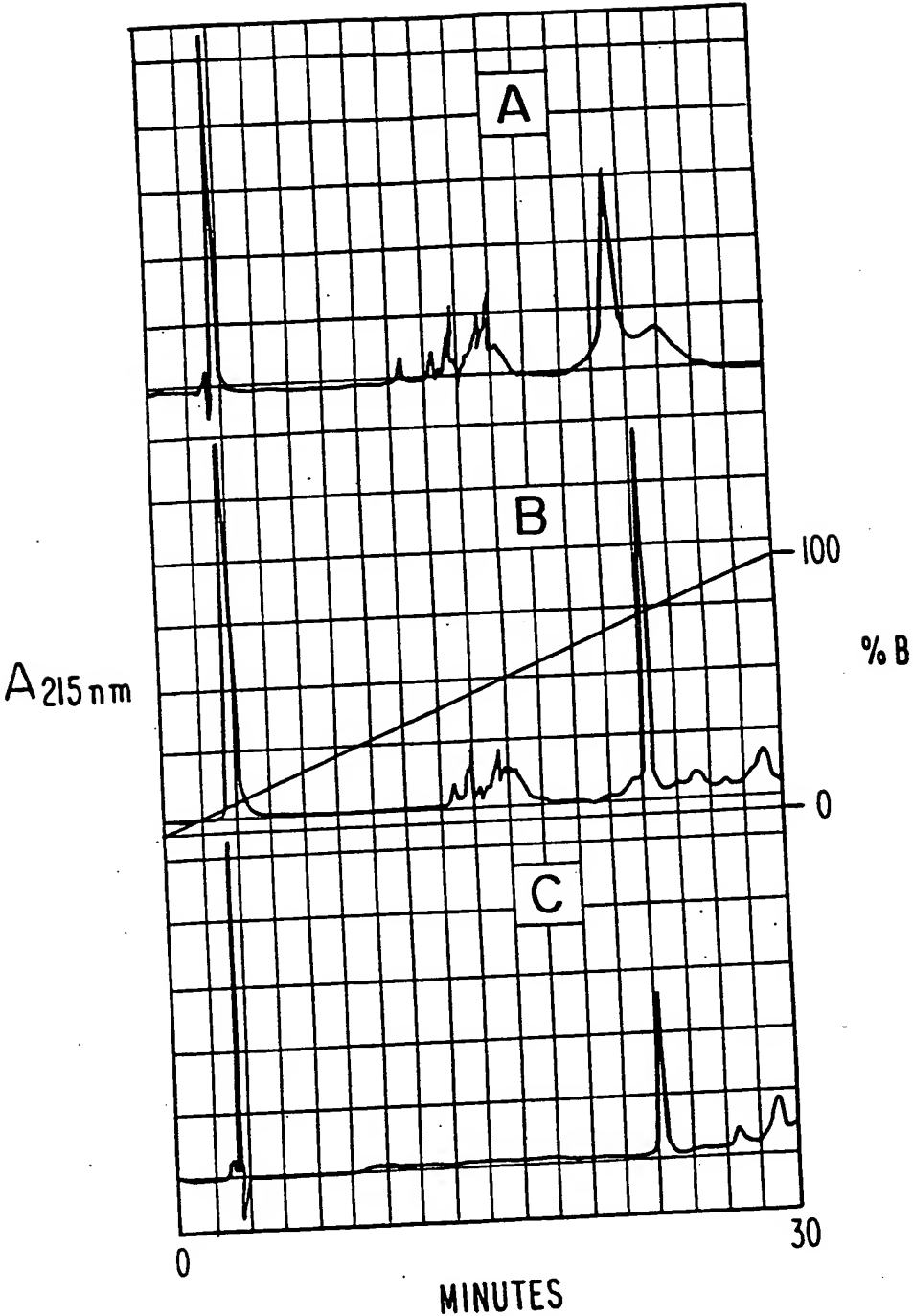


Fig. 9

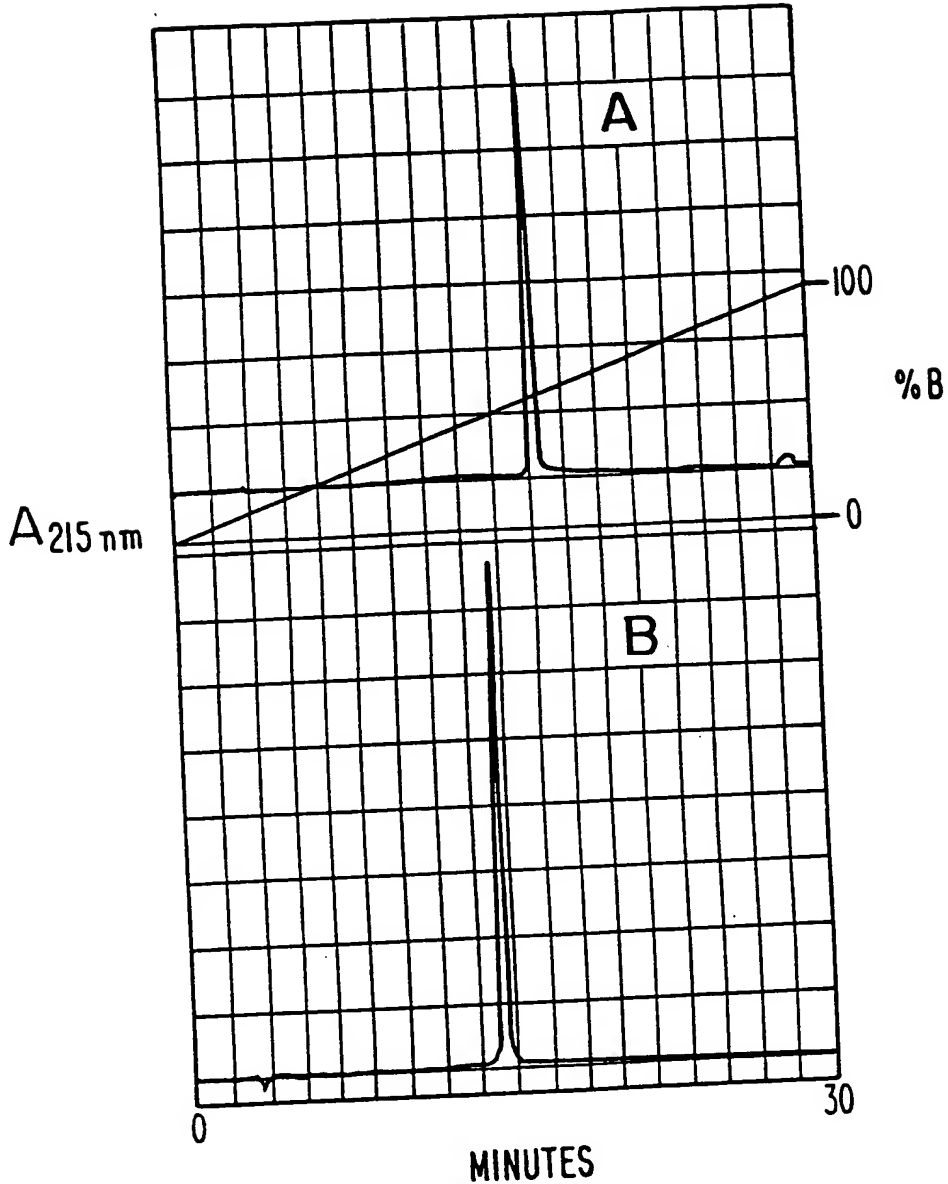


Fig. 10

³² P-oligo	1	1	1	1	1	1	2	2	2
oligo 2	-	-	-	+	+	+	-	-	-
AcrT10Lys	0	+	++	0	+	++	0	+	++

complex

dsDNA

ssDNA

ss

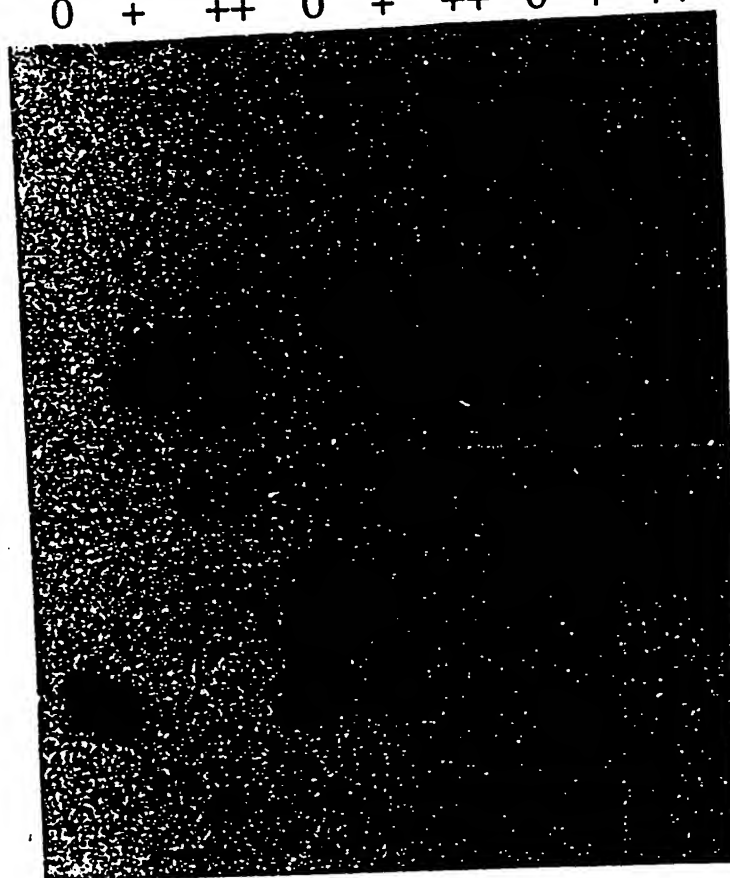


FIG. 11A

³² P-oligo	1	1	1	1	1	1	2	2	2
oligo 2	-	-	-	+	+	+	-	-	-
AcrT10Lys	0	+	++	0	+	++	0	+	++

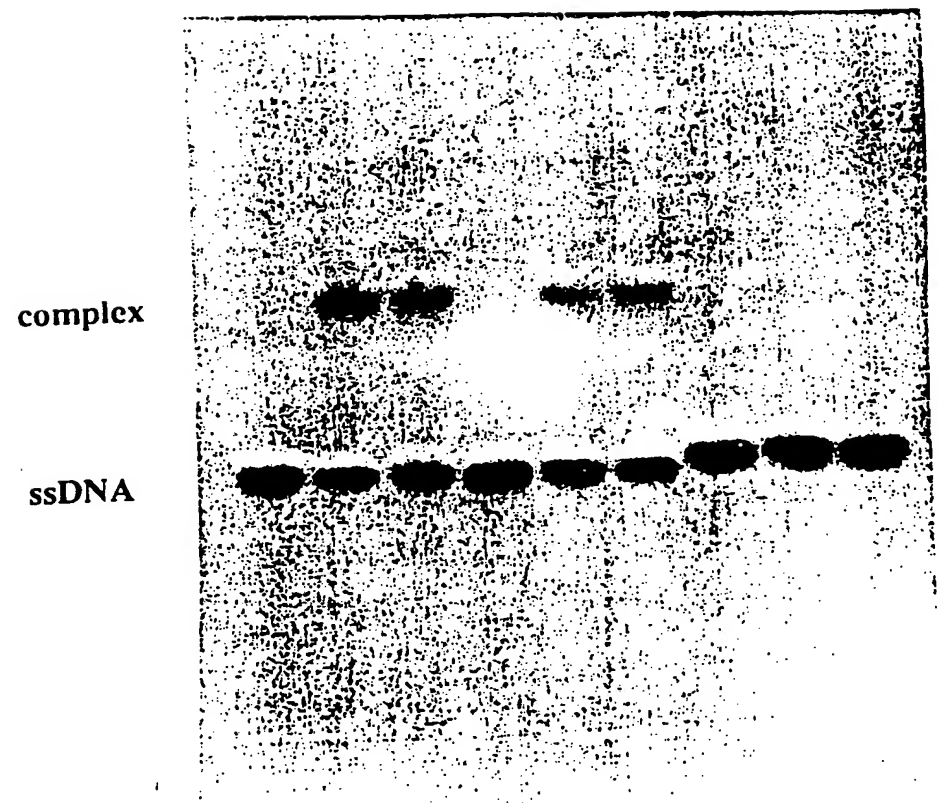


FIG. IIB

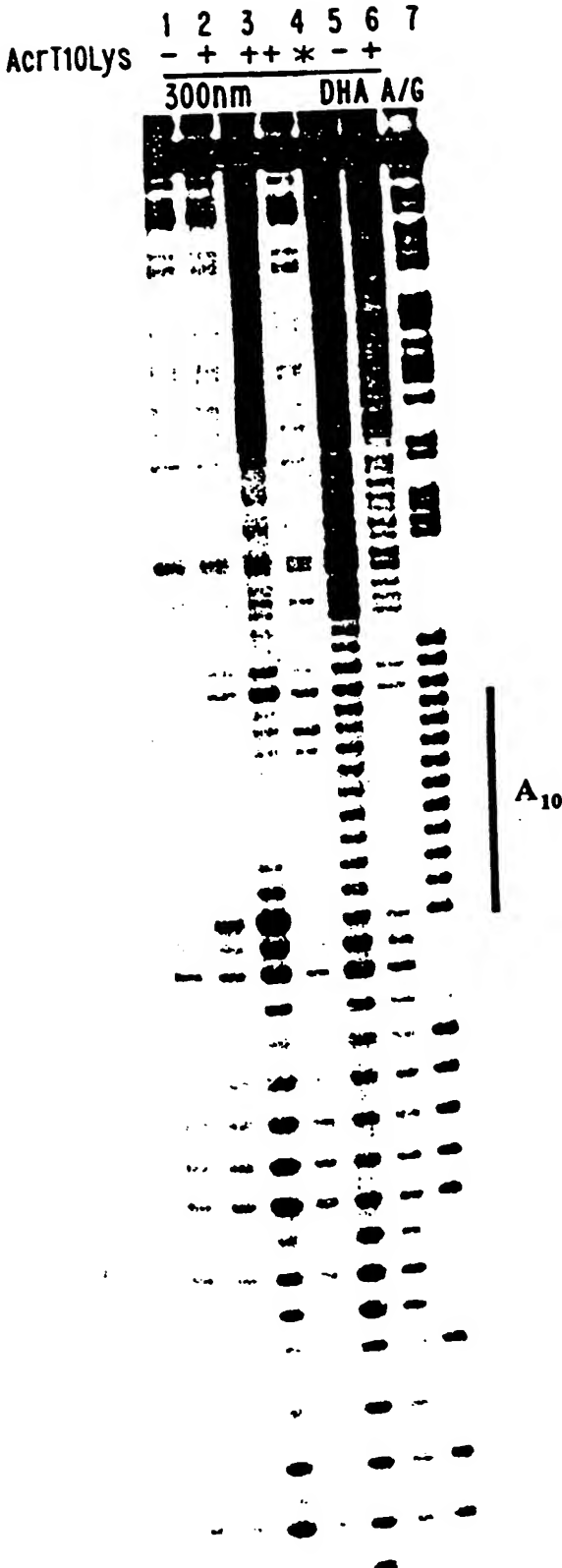


FIG. 12A



FIG. 12 B

S ₁ -nuclease	0.1	1	10	0.1	1	10
AcrT10Lys	-	-	-	+	+	+

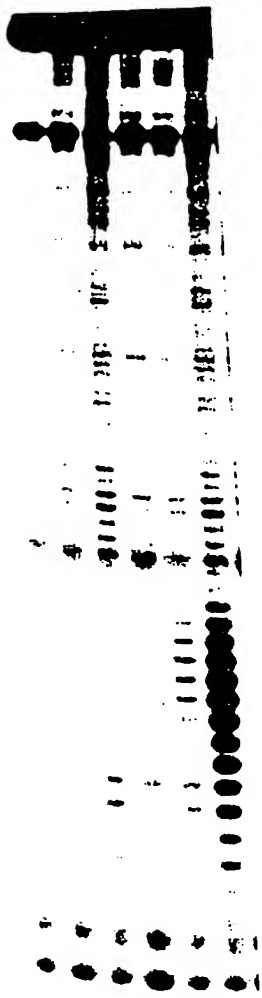


FIG. 12C

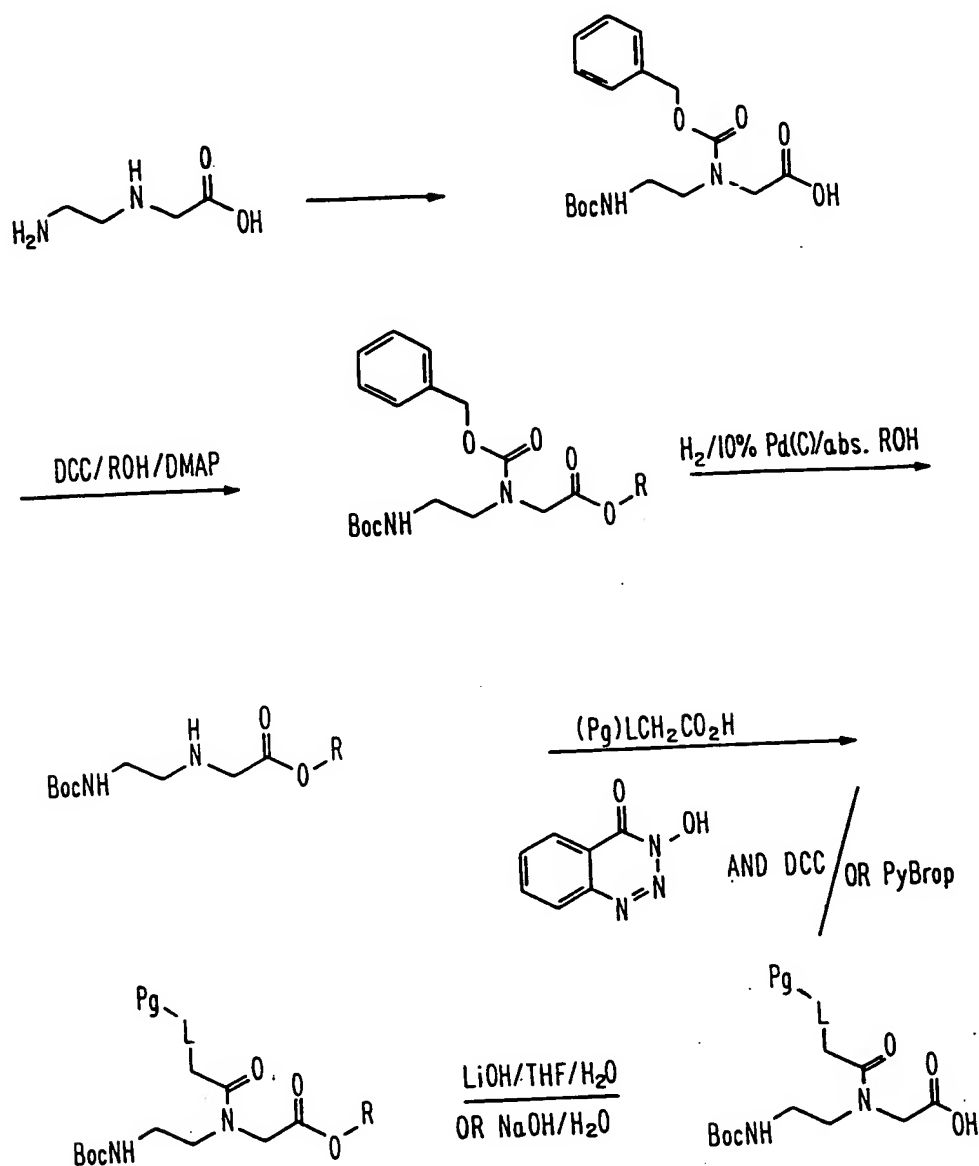


Fig. 13

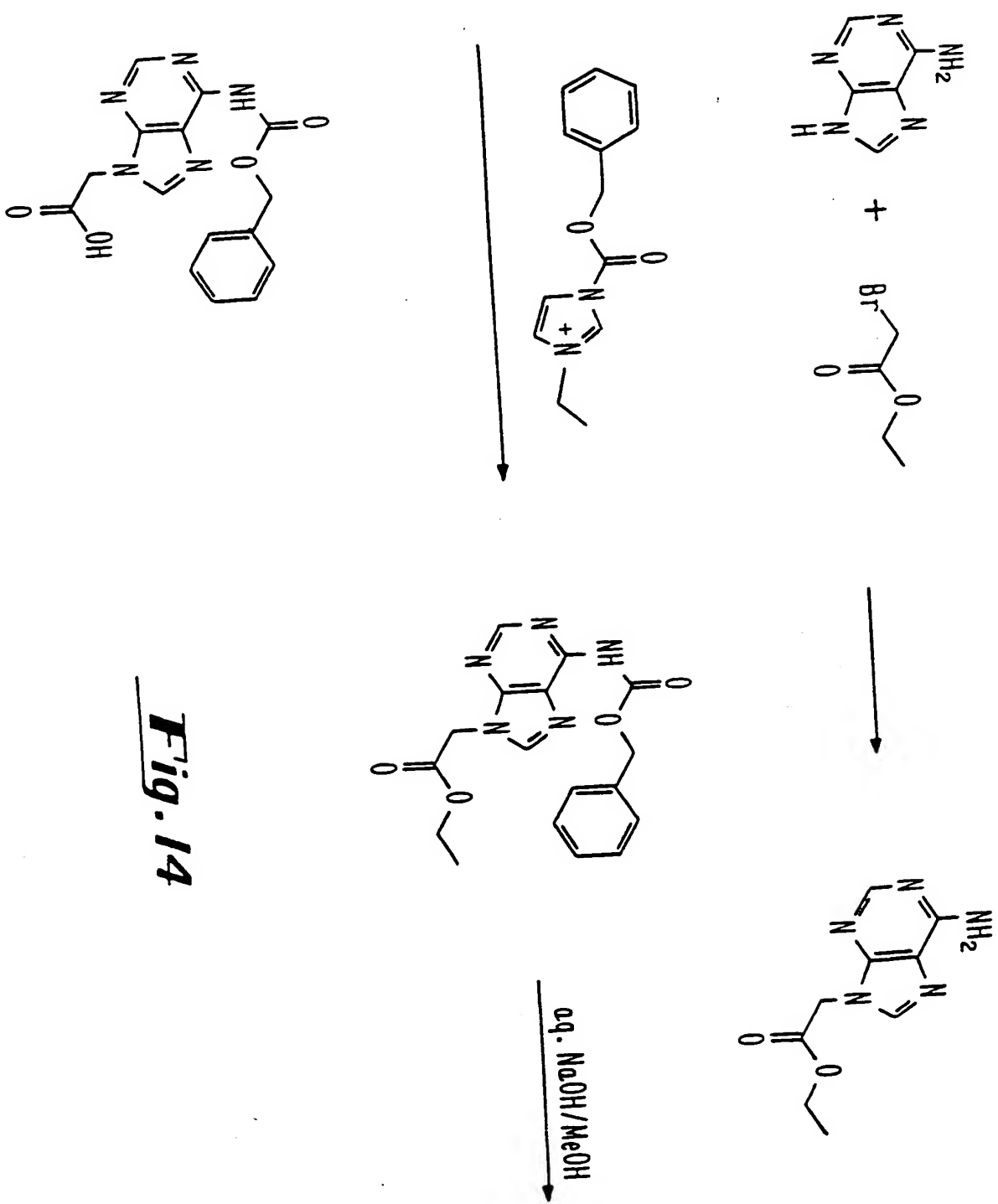


Fig. 14

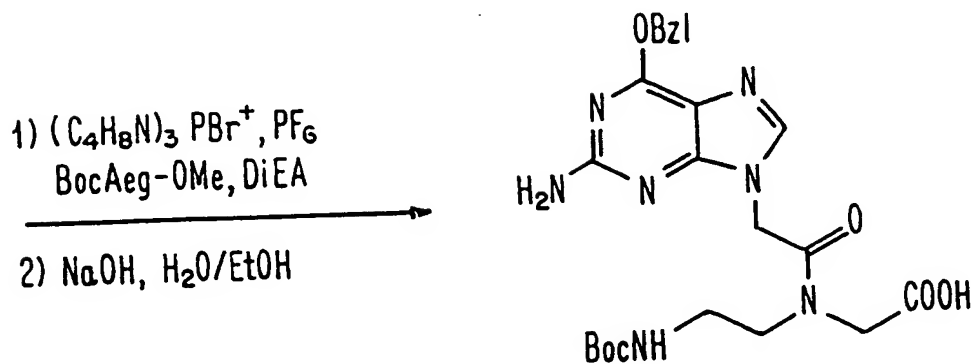
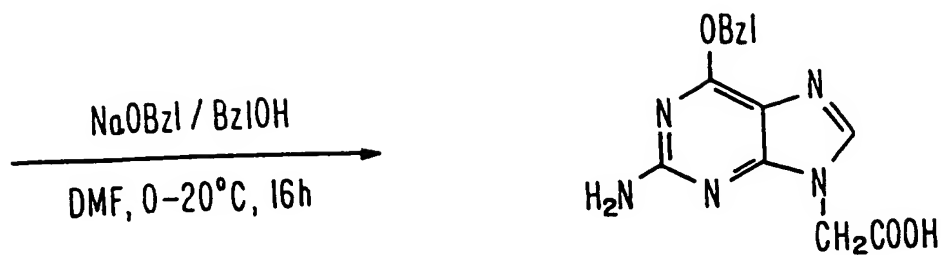
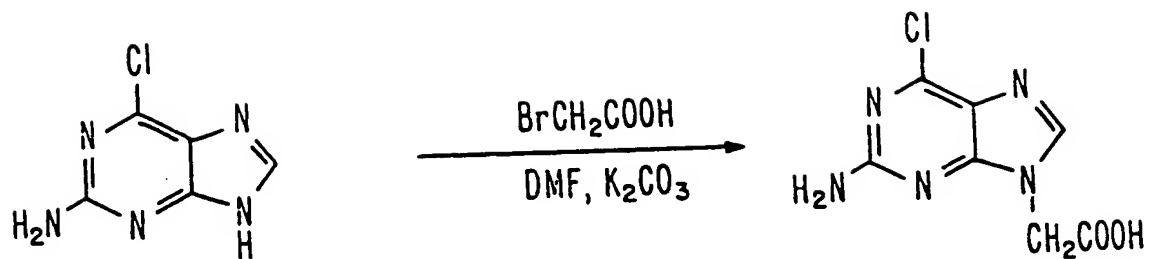
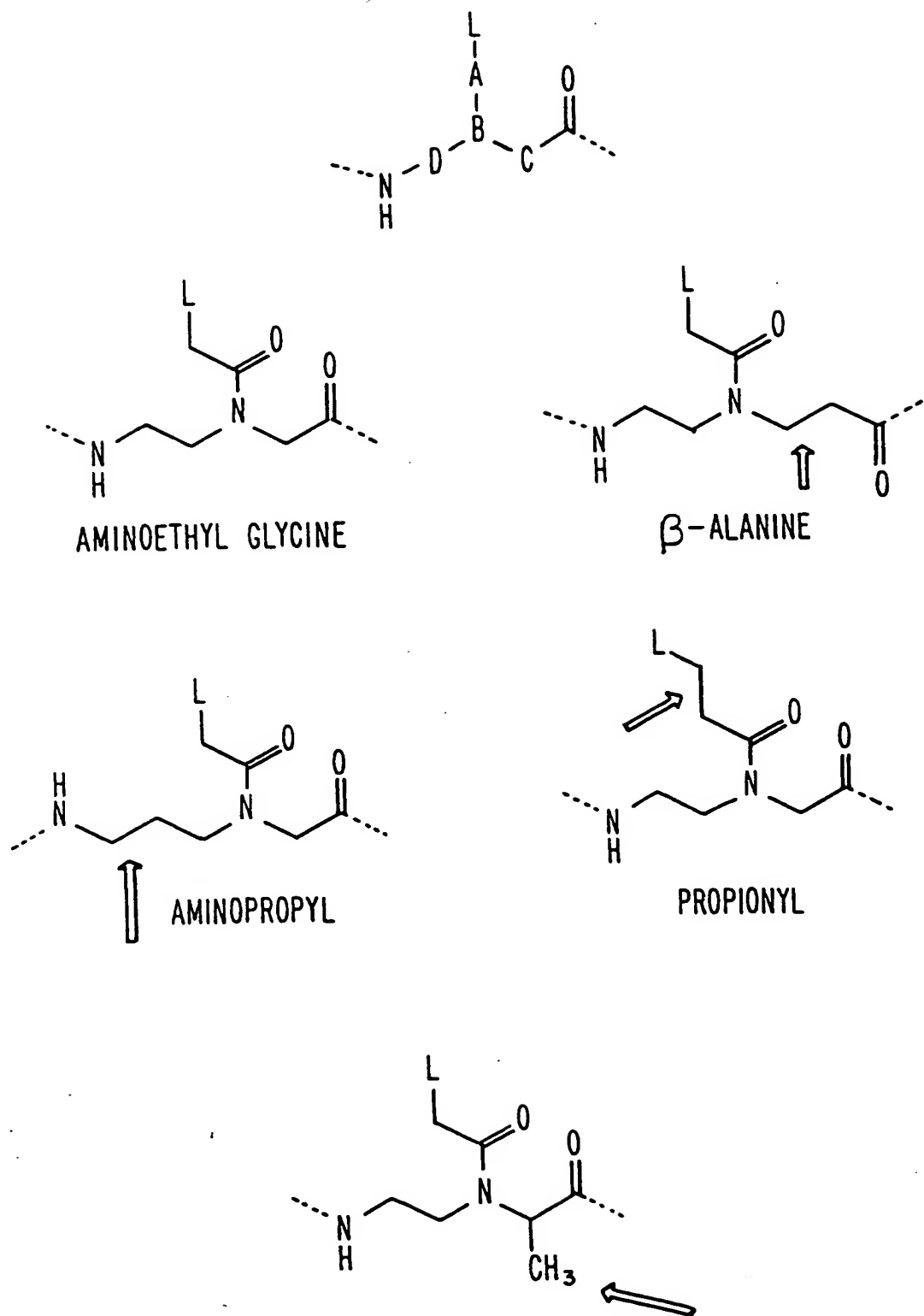


Fig. 15



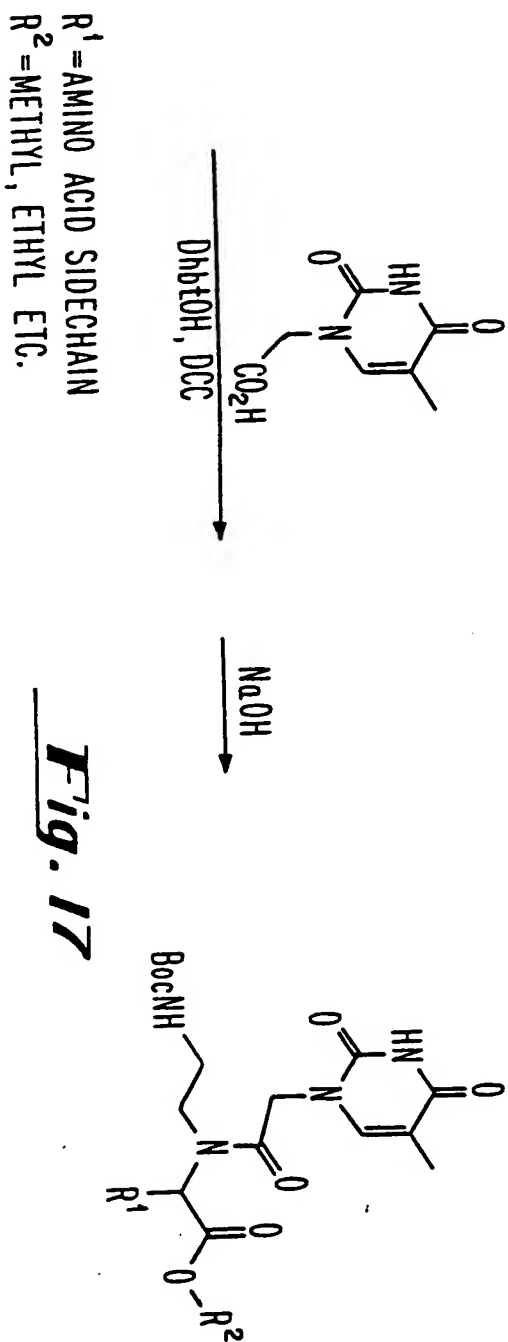
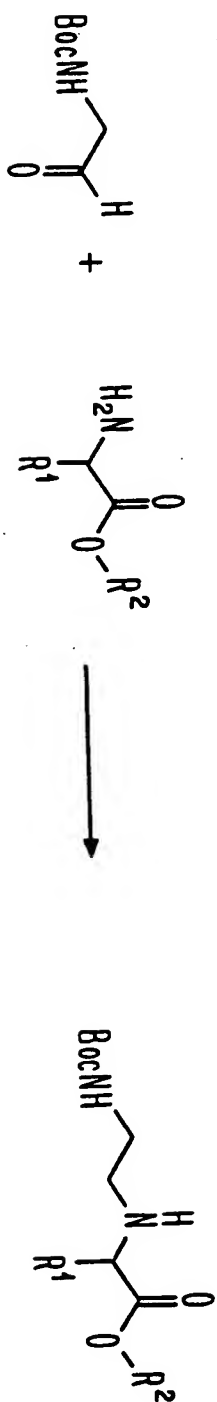
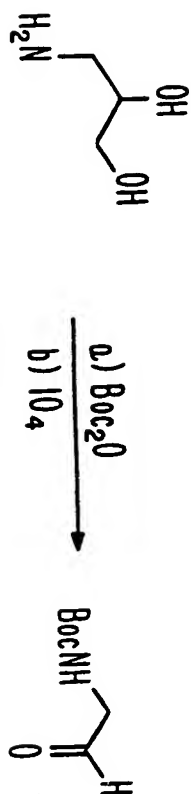


Fig. 17

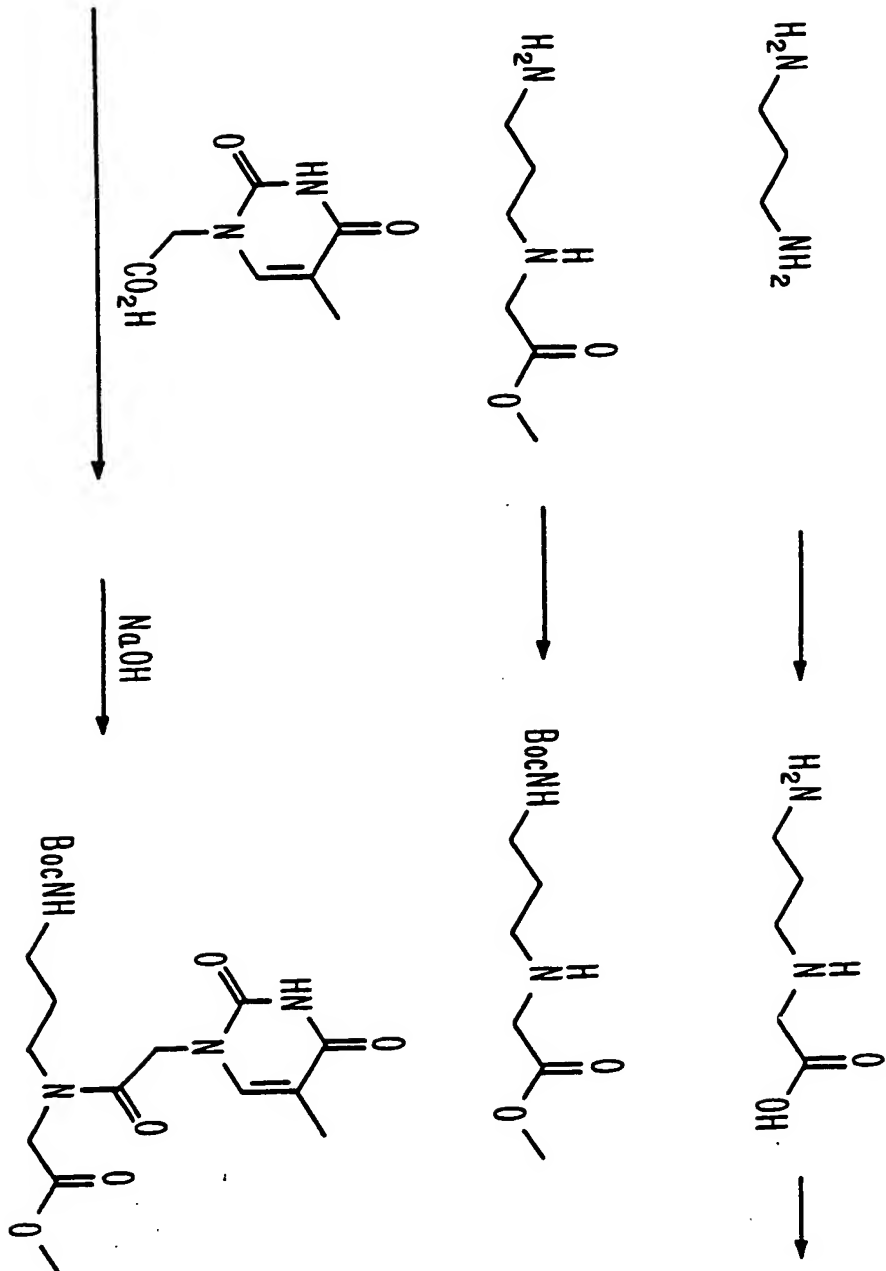


Fig. 18(a)

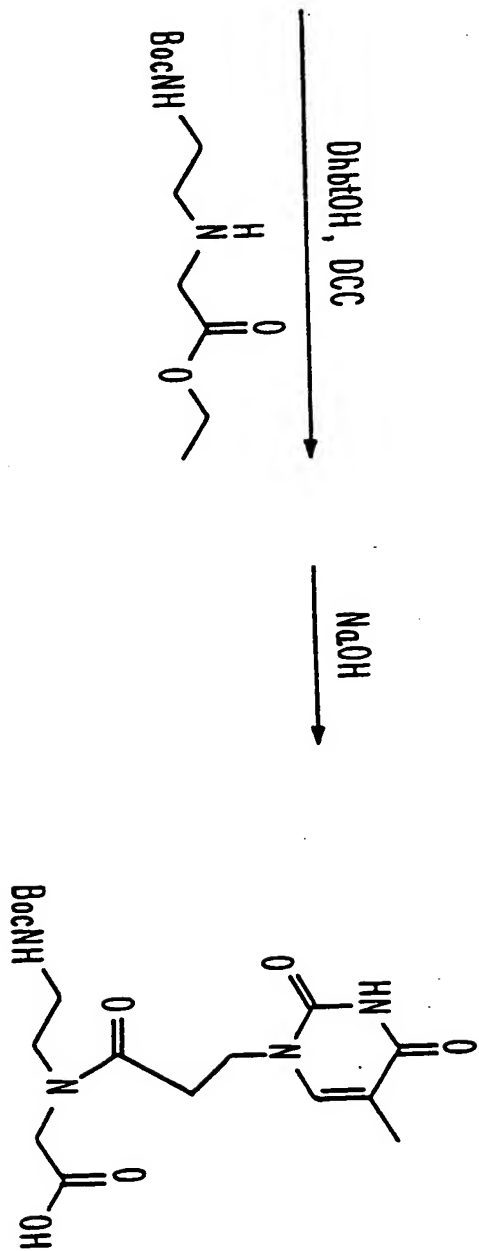
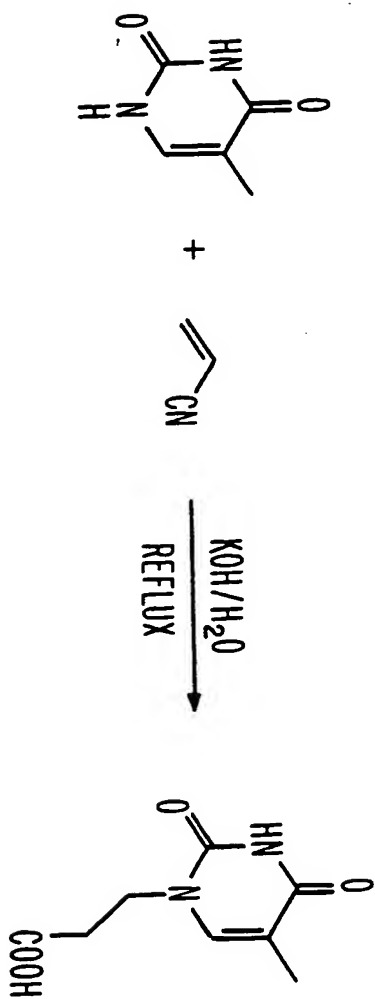


Fig. 18(b)

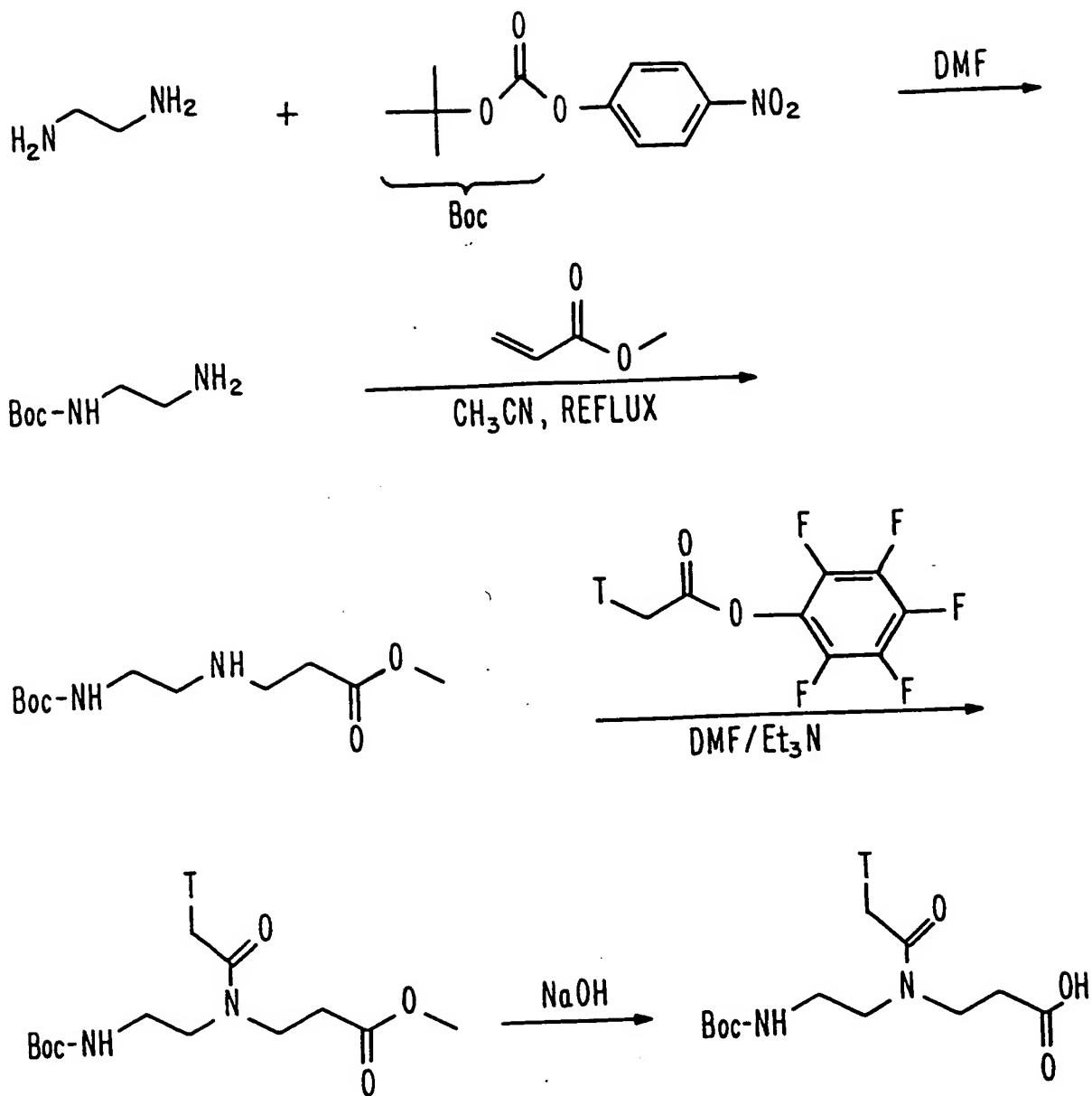


Fig. 19

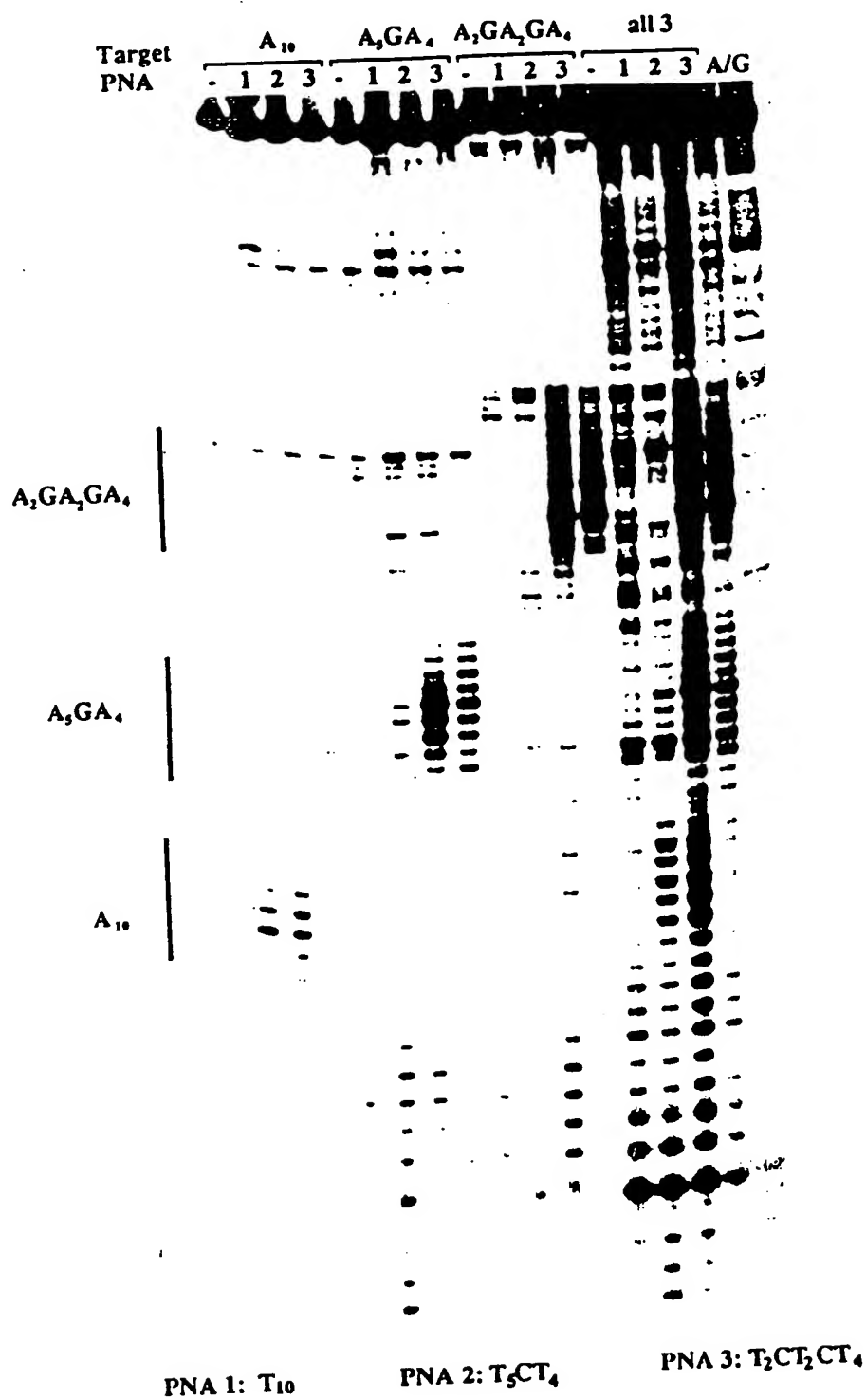


FIG. 20

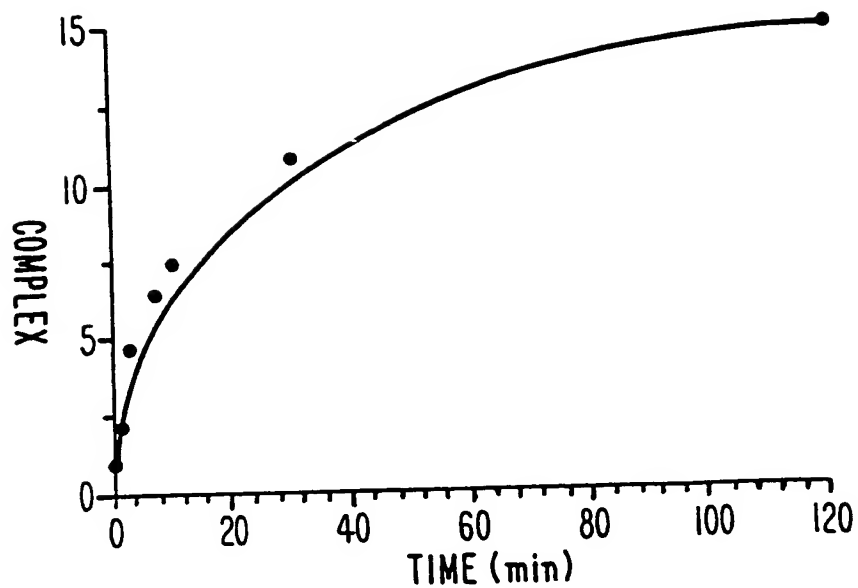


Fig. 21

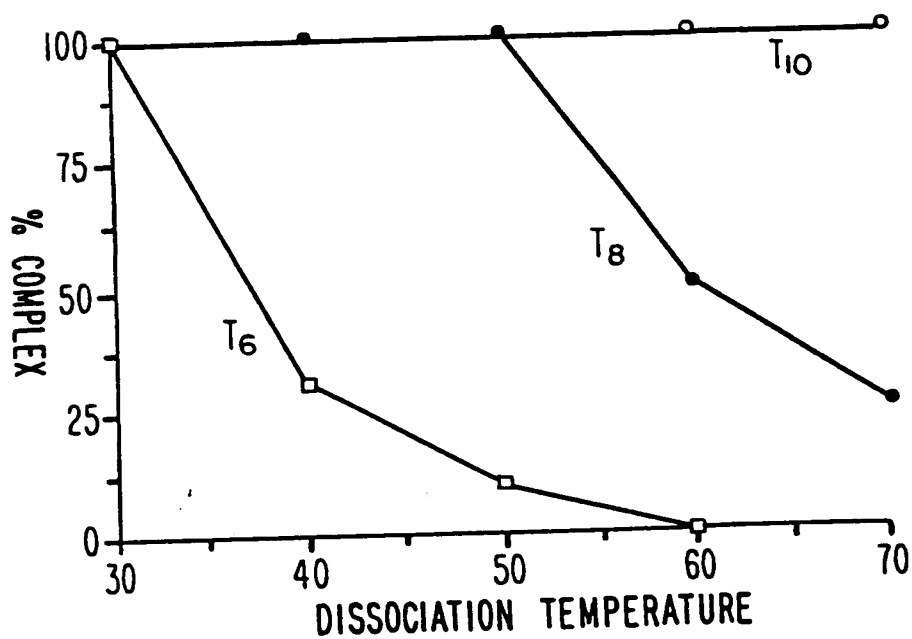
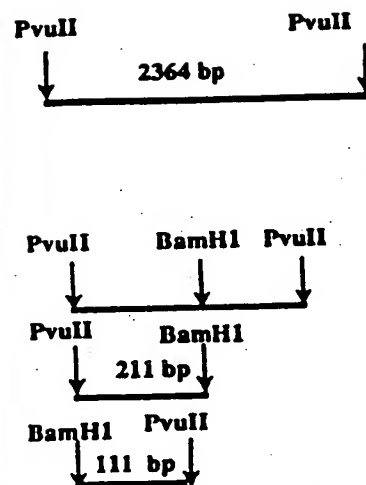
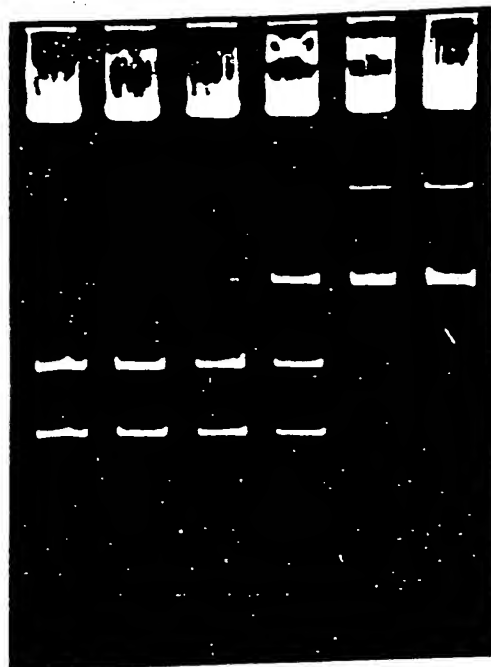


Fig. 22

PNA/DNA 0 0.006 0.02 0.06 0.2 0.6



SEQ ID NO

PNA Target

5'-----GGATCCAAAAAAAAAAGGATCC----- 44
 3'-----CCTAGGTTTTTTTTTTCCTAGG----- 45

BamHI

BamHI

FIG. 23

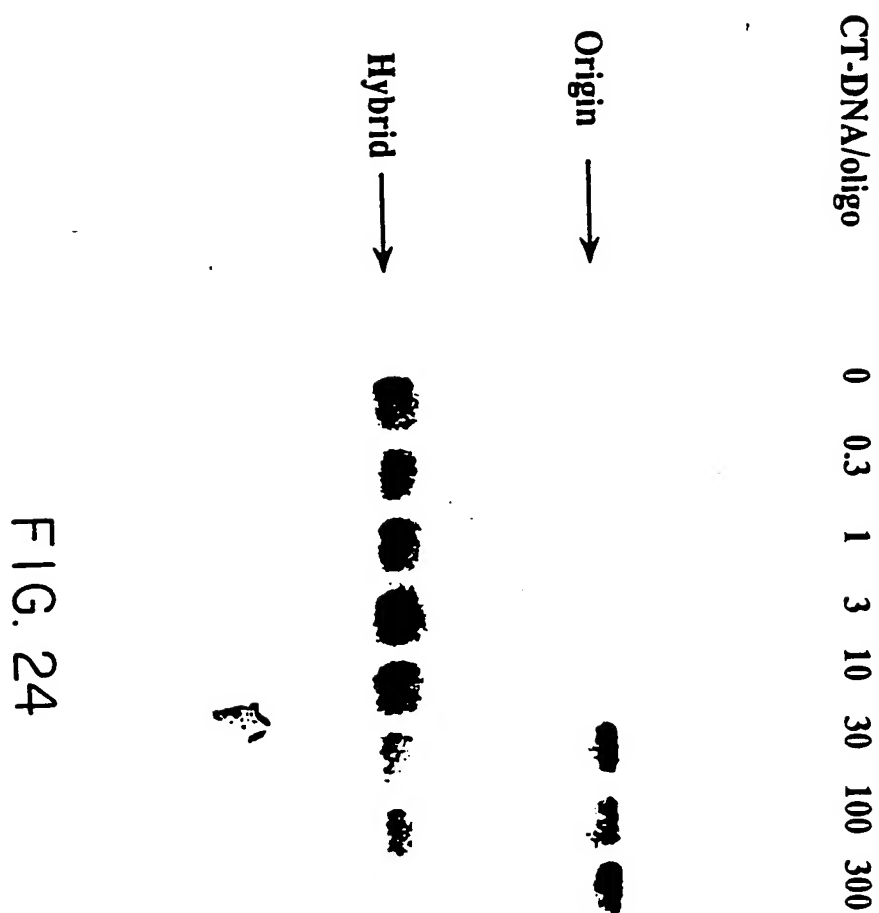


FIG. 24

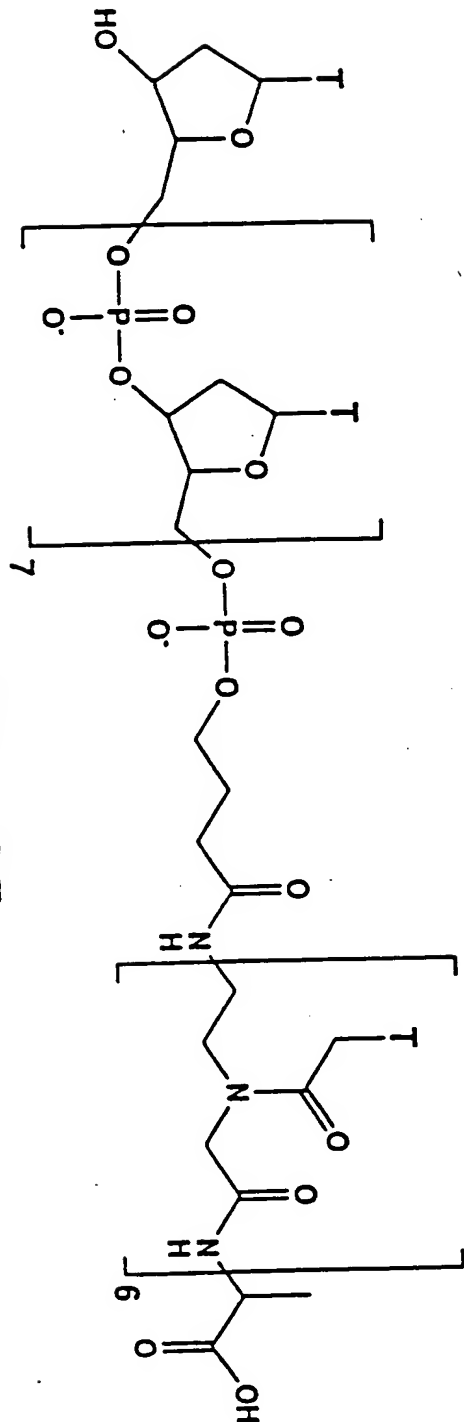


Fig. 25

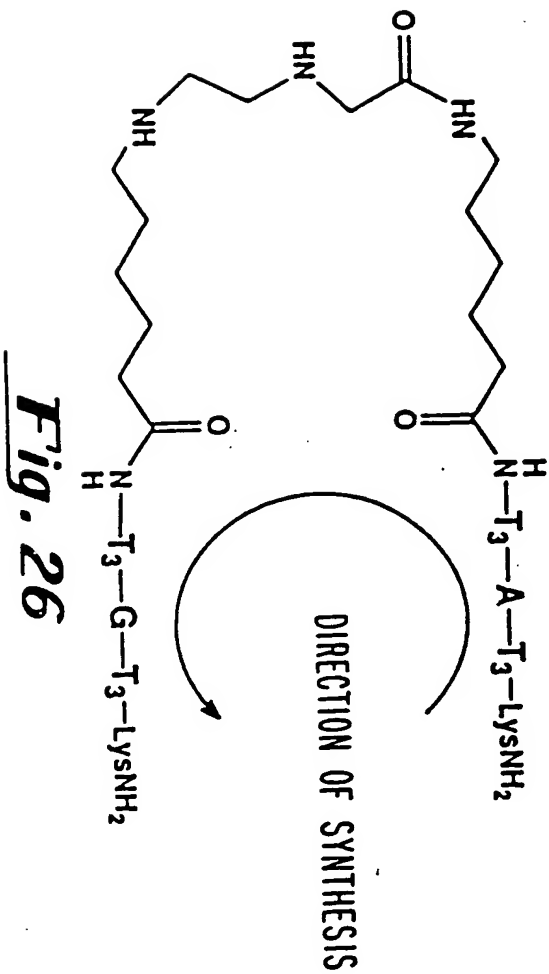


Fig. 26

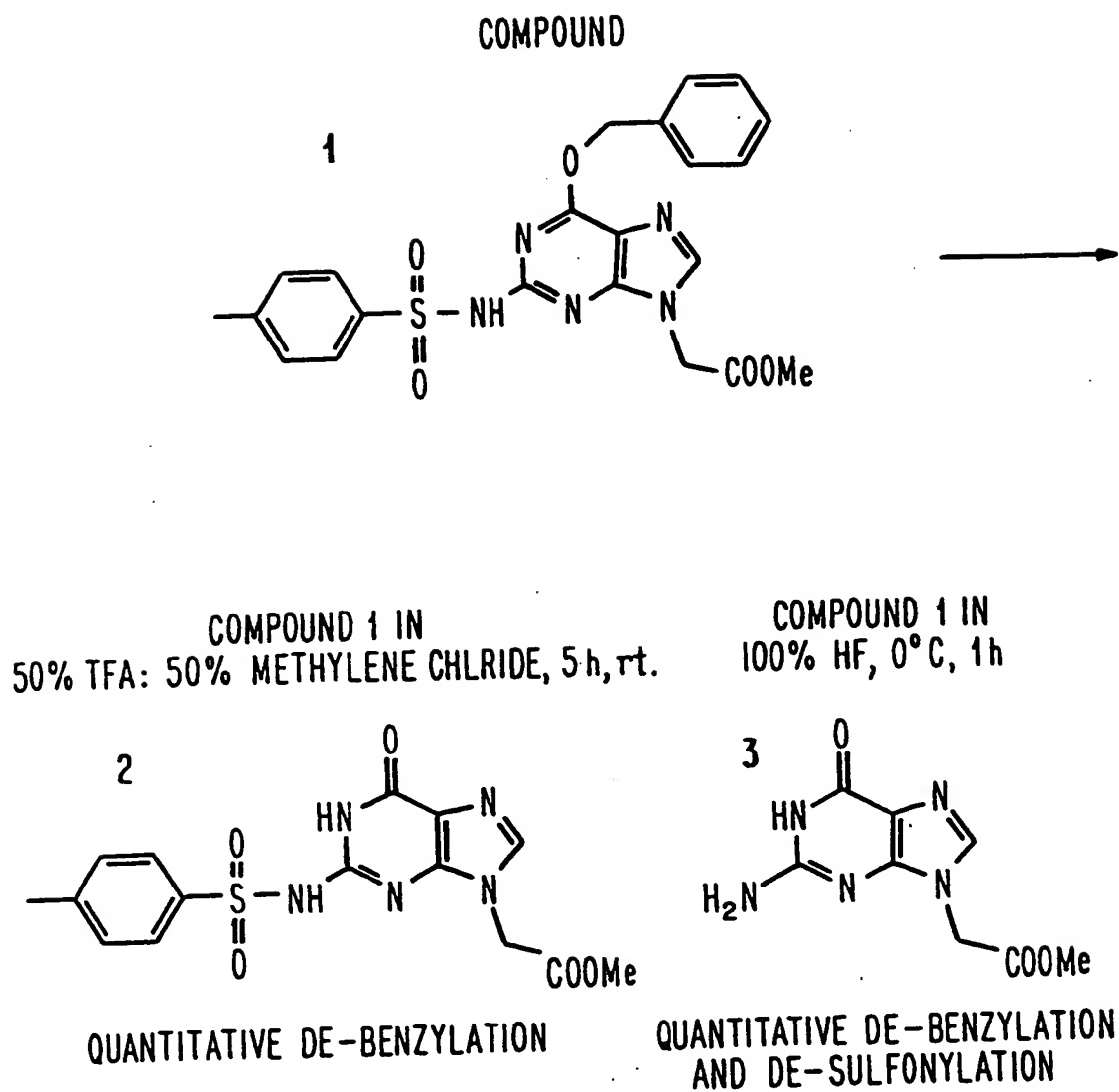


Fig. 27

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